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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,244	06/28/2001	Sreeram Duvvuru	P6197	9154

35690 7590 04/09/2007		EXAMINER
MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.		LESNIEWSKI, VICTOR D
P.O. BOX 398		
AUSTIN, TX 78767-0398	ART UNIT	PAPER NUMBER
	2152	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

		Application No.	Applicant(s)
Office Action Summary		09/896,244	DUVVURU, SREERAM
		Examiner	Art Unit	
		Victor Lesniewski	2152	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>13 February 2007</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-27</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-27</u> is/are rejected.

7)☒ Claim(s) <u>17</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   The amendment filed 2/13/2007 has been placed of record in the file.

2.   Claims 9-16, 18, and 27 have been amended.

3.   The rejection of claims 10-18 under 35 U.S.C. 101 is withdrawn in view of the

amendment.

4.   Claims 1-27 are now pending.

5.   The applicant's arguments with respect to claims 1-27 have been fully considered but

they are not persuasive. A detailed discussion is set forth below.

Response to Amendment

6.   Claim 10 has been amended to state "a computer-readable storage medium". Concerning

the applicant's specification, a storage medium is interpreted as comprising non-volatile or

volatile media. A computer-readable storage medium does not comprise transmission media.

Thus, the rejection of claims 10-18 under 35 U.S.C. 101 has been withdrawn.

7.   Claims 9, 18, and 27 have been amended to show that the request is dispatched to a

software component. The amendment proves a change in scope to these dependent claims as the

claims now explicitly state that a request manager service dispatches said request including said

quality of service context, to a software component in a plurality of software components, based

on said quality of service context. However, none of the amended claims show a patentable

distinction over the prior art of record as discussed below.

8.   Several status identifiers in the amendment have been found to be improper. Please refer

to 37 CFR 1.121(c) and submit the proper status identifiers in any future amendments.

Claim Objections

9.   Claim 17 is objected to because it states "the computer-readable medium of claim 10,"

while claim 10 states "a computer-readable storage medium." It is assumed that the applicant

intends to claim "the computer-readable storage medium of claim 10." Appropriate correction is

required.

Claim Rejections - 35 USC § 103

10.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

11.   Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangipudi et

al. (U.S. Patent Number 6,728,748), hereinafter referred to as Mangipudi, in view of Lin et al.

(U.S. Patent Number 6,463,068), hereinafter referred to as Lin.

12.   Mangipudi disclosed a method for policy based class of service management that utilizes

multiple class of service levels. In an analogous art, Lin disclosed a router that includes a

classifier that classifies packets based on class of service.

13.   Concerning claims 1, 10, and 19, Mangipudi did not explicitly state that the propagating

step includes sending data indicating the quality of service context with the request. However,

sending data with a request that indicates the quality of service context was well known in the art

as evidenced by Lin whose system writes tag information into the request so that the class of

service of the packet may be identified. It would have been obvious to one of ordinary skill in

the art at the time of the applicant's invention to modify the system of Mangipudi by adding the

ability to send data indicating the quality of service context with the request as provided by Lin.

Here the combination satisfies the need for a routing system that can be flexibly designed and

implemented and that ensures that users are directed to web servers and content commensurate

with their service levels. See Mangipudi, column 6, lines 33-41. This rationale also applies to

those dependent claims utilizing the same combination.

14.   Some claims will be discussed together. Those claims which are essentially the same

except that they set forth the claimed invention as a computer readable medium or a system are

rejected under the same rationale applied to the described claim. The below citations refer to

Mangipudi unless otherwise noted.

15.   Thereby, the combination of Mangipudi and Lin discloses:

- <Claims 1, 10, and 19>

    A computer-implemented method for providing differentiated quality of service in an

    application server, comprising: a server system receiving a request, wherein said request

    includes information indicating at least one of user identity, current user role, or a time

    constraint (column 9, lines 55-61); and in response to receiving the request: accessing

    pre-determined policy data (column 9, lines 45-51); establishing a quality of service

    context based on said information included in said request and said policy data (column

    9, lines 37-51); and propagating said quality of service context with said request in the

    server system (column 10, lines 25-31), wherein said propagating comprises sending data

indicating the quality of service context with the request (Lin, column 3, lines 12-25 and 45-55).

- <Claims 2, 11, and 20>

  The method of claim 1, wherein said information further indicates a requested service (column 7, lines 6-9).

- <Claims 3, 12, and 21>

  The method of claim 1 wherein said quality of service context includes information indicating at least one of service class, priority, or deadline (column 9, lines 45-51).

- <Claims 4, 13, and 22>

  The method of claim 1 wherein said establishing a quality of service context is completed at an ingress point (column 7, lines 9-16).

- <Claims 5, 14, and 23>

  The method of claim 4 wherein said ingress point is at least one of a web server or a protocol manager service within said server system (column 9, line 65 through column 10, line 9).

- <Claims 6, 15, and 24>

  The method of claim 1 further comprising, propagating the same quality of service context with a subsequent request related to said request (column 11, lines 38-41).

- <Claims 7, 16, and 25>

  The method of claim 1 wherein said propagating includes inserting said quality of service context adjacent to at least one of a security and transaction context (column 10, lines 21-25).

- <Claims 8, 17, and 26>

  The method of claim 1 wherein a load balancing service dispatches said request including said quality of service context, to an application server in a plurality of application servers, based on said quality of service context (column 10, lines 25-31).

- <Claims 9, 18, and 27>

  The method of claim 1 wherein a request manager service dispatches said request including said quality of service context, to a software component in a plurality of software components, based on said quality of service context (column 10, lines 25-31 and column 7, line 56 through column 8, line 18).

Since the combination of Mangipudi and Lin discloses all of the above limitations, claims 1-27 are rejected.

Response to Arguments

16. In the remarks, the applicant has argued:

- <Argument 1>

  The combination of Mangipudi and Lin does not disclose the features of claim 1 because it does not disclose "propagating said quality of service context with said request in the server system, wherein said propagating comprises sending data indicating the quality of service context with the request" as recited in claim 1.

- <Argument 2>

  The motivation to combine Mangipudi and Lin is improper.

- <Argument 3>

  The combination of Mangipudi and Lin does not disclose the features of claim 7 because it does not disclose "inserting said quality of service context adjacent to at least one of a security and transaction context" as recited in claim 7.

- <Argument 4>

  The combination of Mangipudi and Lin does not disclose the features of claim 9 because it does not disclose "wherein a request manager service dispatches said request including said quality of service context, to a software component in a plurality of software components, based on said quality of service context" as recited in claim 9.

17.   In response to argument 1, the combination of Mangipudi and Lin does disclose the propagating step as recited in claim 1. As the applicant admits, "Mangipudi teaches that a class of service is defined for an incoming request and based on that class of service, the request will be forwarded to a particular server machine." This meets the limitation of propagating a quality of service context with a request. Thus, even though the applicant states that "Mangipudi clearly teaches away from propagating a quality of service context with a request," Mangipudi actually teaches this and does not teach away. As the applicant states, "Mangipudi teaches assigning an incoming request a particular class, and based on that class, forwarding the request to a particular server or cluster." Clearly this means that each forwarded request has a context.

18.   Lin was cited as disclosing the further limitation that the propagating "comprises sending data indicating the quality of service context with the request." The applicant has not argued the teaching of this limitation by Lin. Again concerning the argument that Mangipudi teaches away,

it is maintained that Mangipudi does not explicitly state that data indicating the context cannot be included with the request.

19.   In response to argument 2, it is maintained that the motivation to combine Mangipudi and Lin is proper. Mangipudi states the need for a routing system that can be flexibly designed and implemented and that ensures that users are directed to web servers and content commensurate with their service levels. Providing class of service tags as taught by Lin is seen as another way to ensure that users are directed to web servers and content commensurate with their service levels. One of ordinary skill in the art with knowledge of Mangipudi's system would have easily been able to combine the teachings of Lin to provide class of service tags in requests.

20.   In response to argument 3, the combination of Mangipudi and Lin does disclose a quality of service context adjacent to a transaction context as recited in claim 7. The previous line citation to Mangipudi, column 10, lines 21-25, shows transaction prioritization used in conjunction with the class of service parameters. This meets the limitation of an adjacent transaction context. The claim simply states "at least one of a security and transaction context" and provides no further information or detail so as to define or describe what a security context or a transaction context may be. Mangipudi clearly states a transaction context as his system even tracks the transaction type of requests. See also column 13, lines 28-41. It is also noted that Mangipudi's system can implement classes of service in conjunction with an authentication process (see column 9, lines 58-67), which could be considered a security context.

21.   The applicant has gone on to argue that the claim is distinguished based on the word "inserting." However, the "inserting" is not further described in the claim so as to show how it differentiates from the prior art. As already discussed, Mangipudi teaches the presence of a

quality of service context when forwarding requests in the system. If the applicant intends to claim that the data indicating the quality of service context is inserted into the request packet in some specific fashion, then the applicant should make this clear in the claims.

22.   In response to argument 4, the combination of Mangipudi and Lin does disclose dispatching said request to a software component as recited in claim 9. Although the applicant has argued that Mangipudi teaches selecting a particular back-end server machine based on a class of service, Mangipudi's back-end servers are operated by software components. In fact, Mangipudi's whole server system is based on the functionality of distributed software processes. In order for the back-end server to receive the forwarded request it must utilize particular software components. For further detail, see Mangipudi, column 7, line 56 through column 8, line 18.

23.   In addition, the applicant has argued that claims rejected under 35 U.S.C. 103, but not explicitly discussed, are allowable based on the above arguments. Thus, claims disclosing similar limitations to the discussed claims and related dependent claims remain rejected under the same reasoning as presented above.

Conclusion

24.   The applicant's amendment necessitated the new grounds of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). The applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO
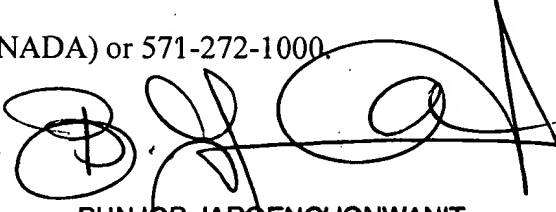
MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

25.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Victor Lesniewski whose telephone number is 571-272-3987.

The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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